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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/881,949

06/15/2001

Lani William Brewer

GAD-019

7571

26717

7590

07/17/2002

FALK AND FISH
16590 OAK VIEW CIRCLE
MORGAN HILL, CA 95037

EXAMINER

ABELSON, RONALD B

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,949

Applicant(s)

BREWER ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-25, 28-35, 39-41 and 43 is/are allowed.
- 6) ☒ Claim(s) 26, 27, 36-38 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of the applicant's admitted prior art, and further in view of Ahuja (US 6,222,837) and Hassler (US 5,590,379).

Regarding claim 26, the applicant's admitted prior art teaches method and apparatus for a switch (fig. 1 box 14) for a packet or frame switch network (fig. 1) including one or more client devices (fig. 1 box 10, 12) and one or more storage devices (fig. 1 box 15, 18) and a storage manager (fig. 1 box 20). The switch network (fig. 1) has conventional routing circuitry and means for processing and storing redirection commands and comparing address data of predetermined types of frames or packets and for readdressing any frames or packets

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that match any stored redirection command (fig. 2A (1), (4), fig. 2B (7)).

The applicant's admitted prior art fails to teach the functions listed above being performed by the switch.

Ahuja teaches the integration of a server and switch in a packet switching environment (col. 7 lines 61 - 67). Ahuja's motivation for integrating the two is to facilitate ease of communication. Note, the applicant has stated in the specification "the invention can be implemented by modifying the software in the storage manager 20 and switch 14 in the prior art structure of Figure 1" (col. 11 lines 4 - 6).

The combination of the applicant's admitted prior art and Ahuja is silent on the subject of purging information stored in memory that is no longer useful.

Hassler teaches purge commands to mark data sets as invalid (col. 4 lines 11 - 26). Note the data sets could be the association between the old address data and new address data that is no longer needed.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of the applicant's admitted prior art and Ahuja and Hassler before him/her and with the teachings [a] as shown by the combination of the applicant's admitted prior art and Ahuja, the integration of a server and

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switch in a packet switching environment comprising: a switch for a packet or frame switch network including one or more client devices, one or more storage devices and a storage manager, and conventional routing circuitry and means for processing and storing redirection commands and comparing address data of predetermined types of frames or packets and for readdressing any frames or packets that match any stored redirection command, and [b] as shown by Hassler, purge commands to mark data sets as invalid, to be motivated to modify the system of the combination of the applicant's admitted prior art and Ahuja by incorporating purge commands for marking data sets as invalid. This could be done in software. This would improve the system by providing a proven, reliable method of removing information from memory that is no longer valid. This would help prevent congestion.

3. Claims 27, 36-38, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of the applicant's admitted prior art, Ahuja, and Hassler as applied to claim 26 above, and further in view of Uda (US 5,933,580).

In addition to the limitations listed in claim 26, the combination of the applicant's admitted prior art, Ahuja, and Hassler teaches a means for receiving read or write transaction

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request from one or more client devices and mapping the data designated to a storage device, and for sending corresponding read or write requests to the storage device to start the transaction (spec: fig. 2A (3) (4)). In addition, the combination of the applicant's admitted prior art, Ahuja, and Hassler teaches a means for using redirection criteria (fig. 2B (7)).

The combination of the applicant's admitted prior art, Ahuja, and Hassler is silent on status frames.

Uda teaches in a client/server environment status packets are used to transmit status information between the client and server (col. 14 lines 43 - 46). It would be obvious to one skilled in the art that status frames could be used to transmit a message indicating what information should be purged.

Therefore it would have been obvious to one of ordinary skill in the art, having both the combination of the applicant's admitted prior art, Ahuja and Hassler and Uda before him/her and with the teachings [a] as shown by the combination of the applicant's admitted prior art, Ahuja, and Hassler, the integration of a server and switch in a packet switching environment comprising: a switch for a packet or frame switch network including one or more client devices, one or more storage devices and a storage manager, and conventional routing

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circuitry and means for processing and storing redirection commands and comparing address data of predetermined types of frames or packets and for readdressing any frames or packets that match any stored redirection command, and [b] as shown by Uda, status packets are used to transmit status information between the client and server, to be motivated to modify the system of the combination of the applicant's admitted prior art, Ahuja, and Hassler by using status packets to transmit status information between client and server. This could be done in software. This would improve the system by providing a proven, reliable method for notifying components of the system of the processing status.

Regarding claims 36-38, in addition to the limitations listed in claim 27, the combination of the applicant's admitted prior art, Ahuja, Hassler, and Uda teaches transmitting read requests from the storage manager to one or more storage devices (fig. 2B (5)) and responding to read requests by transmitting frames or packets containing the requested data addressed to the storage manager (fig. 2B (6)). In addition, the combination teaches that routing information is contained in the packet header (Ahuja: destination information, col. 2 lines 11 - 23). Therefore it would have been obvious to one skilled in the art

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that changing the header information could perform rerouting of the packets.

Regarding claim 42, in addition to the limitations listed in claim 36-38, the combination of the applicant's admitted prior art, Ahuja, Hassler, and Uda teaches lookup tables (spec: fig. 2A (4)).

Allowable Subject Matter

4. Claims 1-25, 28-35, and 39-41, and 43 are allowed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

RA

Ronald Abelson
Examiner
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RA

July 12, 2002

Chau T. Nguyen

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
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